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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,206	03/04/2002	David F. Bantz	YOR920010529US1	6322

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EXAMINER	
CERVETTI, DAVID GARCIA	

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,206	BANTZ ET AL.	
	Examiner	Art Unit	
	David G. Cervetti	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

5-0-0

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities: "a method as in claim **15 for comprising** deleting the decryption key stored in the memory upon **a predetermined the event**". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US Patent Number: 5,267,312), and further in view of Hsu et al. (US Patent Number: 6,041,410).

Regarding claim 1, Thompson et al. teach a hearing device adapted to receive the encrypted audio sound, decrypt the encrypted audio sound, and transmit signals corresponding to the decrypted audio sound to an acoustic transducer of the hearing device (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); and wherein the hearing device is adapted not to decrypt the encrypted audio sound without receipt of the decryption key, corresponding to the encrypted audio sound (column 9, lines 33-68, column 10, lines 1-30). However, Thompson et al. do not expressly disclose the use of a key fob to transmit a decryption key to the hearing device. Hsu et al. teach using a key fob for user authentication to a system to access data (column 6, lines 50-

67, column 7, lines 1-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit a decryption key from the key fob to the hearing device to decrypt the data. One of ordinary skill in the art would have been motivated to do so because the use of key fobs to authenticate users was known in the art (Hsu et al., columns 1-2).

Regarding claim 5, the combination of Thompson et al. and Hsu et al. teaches the limitations as set forth under claim 1 above. Furthermore, Hsu et al. teach wherein the key FOB comprises a wireless transmitter for transmitting the decryption key to the hearing device (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a key FOB comprising a wireless transmitter for transmitting the decryption key. One of ordinary skill in the art would have been motivated to do so because the use of a wireless transmitter for transmitting data was well known in the art (Hsu et al., column 2, lines 15-57).

Regarding claim 6, the combination of Thompson et al. and Hsu et al. teaches the limitations as set forth under claim 5 above. Furthermore, Hsu et al. teach wherein the key FOB comprises a biometric sensor (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a key FOB comprising a biometric sensor. One of ordinary skill in the art would have been motivated to do so because the use of a biometric sensor was well known in the art (Hsu et al., columns 1-2).

Regarding claim 7, the combination of Thompson et al. and Hsu et al. teaches the limitations as set forth under claim 6 above. Furthermore, Hsu et al. teach wherein the biometric sensor comprises a fingerprint sensor (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a biometric sensor comprising a fingerprint sensor. One of ordinary skill in the art would have been motivated to do so because the use of a fingerprint sensor was well known in the art (Hsu et al., columns 1-2).

Regarding claim 8, the combination of Thompson et al. and Hsu et al. does not disclose expressly wherein the key FOB comprises means for transmitting a plurality of different decryption keys, and means for periodically changing the decryption key transmitted to the hearing device. However, Examiner takes Official Action that having key fobs generate/transmit a plurality of different keys was well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the key fob transmit a plurality of different keys since Examiner takes Official Notice that having key fobs generate/transmit a plurality of different keys was well known in the art.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. and Hsu et al. as applied to claim 1 above, and further in view of Neoh (US Patent Number: 6,668,204).

Regarding claim 2, the combination of Thompson et al. and Hsu et al. does not disclose expressly wherein the hearing device comprises a memory having the

decryption key stored therein when the key FOB transmits the decryption key to the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store a decryption key in a hearing device to decrypt encrypted data. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 3, the combination of Thompson et al., Hsu et al., and Neoh does not disclose expressly wherein the hearing device comprises means to delete the decryption key stored in the memory after a predetermined period of time. However, Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key after a predetermined period of time since Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art.

Regarding claim 4, the combination of Thompson et al., Hsu et al., and Neoh teaches the limitations as set forth under claim 2 above. Furthermore, Neoh teaches a hearing device comprising a wireless receiver for receiving a wireless signal (column 3, lines 45-67). Neoh does not disclose expressly receiving a wireless signal comprising the decryption key from the key FOB. Hsu et al. teach using a key fob for user authentication to a system to access data (column 6, lines 50-67, column 7, lines 1-34).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the decryption key from the key fob in the signal the wireless receiver received. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

5. **Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neoh and Dabbish et al. (US Patent Number: 4,914,697), and further in view of Thompson et al.**

Regarding claim 9, Neoh teaches an audio hearing device. Dabbish et al. teach a microphone; a system for decrypting encrypted audio sounds received at the microphone (column 4, lines 25-37). Neoh and Dabbish et al. do not expressly disclose an acoustic transducer adapted to be placed at a user's ear, the acoustic transducer being connected to the decrypting system for transmitting decrypting audio sounds from the acoustic transducer to a user's ear, wherein the decrypting system comprises a memory and a system for receiving and temporarily storing a decryption key in the memory, and wherein the decrypting system requires a predetermined decryption key in the memory in order for the decrypting system to decrypt the encrypted audio sounds. However, Thompson et al. teach an acoustic transducer adapted to be placed at a user's ear, the acoustic transducer being connected to the decrypting system for transmitting decrypting audio sounds from the acoustic transducer to a user's ear (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); wherein the

decrypting system comprises a memory and a system for receiving and temporarily storing a decryption key in the memory, and wherein the decrypting system requires a predetermined decryption key in the memory in order for the decrypting system to decrypt the encrypted audio sounds (column 9, lines 33-68, column 10, lines 1-30).

Regarding claim 10, the combination of Neoh, Dabbish et al., and Thompson et al. teaches the limitations as set forth under claim 9 above. Furthermore, Neoh teaches wherein the memory is volatile (column 3, lines 45-67, column 4, lines 1-60, column 5, lines 23-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use volatile memory. One of ordinary skill in the art would have been motivated to do so because the use of volatile memory is well known in the art.

Regarding claim 11, the combination of Neoh, Dabbish et al., and Thompson et al. teaches the limitations as set forth under claim 9 above. Neoh teaches wherein the system for decrypting encrypted audio sounds comprises a wireless receiver (column 3, lines 45-67). Neoh does not disclose expressly receiving a signal having the decryption key. Thompson et al. teach using a signal having the decryption key (column 9, lines 33-68, column 10, lines 1-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the decryption key in the signal the wireless receiver received. One of ordinary skill in the art would have been motivated to do so because it was known in the art to send a decryption key along with a signal (Thompson et al., column 3, lines 1-47).

6. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. and Hsu et al., and further in view of Neoh.

Regarding claim 12, Thompson et al. teach receiving the encrypted audio sounds at a device having an acoustic transducer at an ear of a user (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); and decrypting the encrypted audio sounds by the device if the decryption key matches a predetermined decryption key for the encrypted audio sounds (column 9, lines 33-68, column 10, lines 1-30). Hsu et al. teach receiving a decryption key by the device (column 6, lines 50-67, column 7, lines 1-34). Thompson et al. and Hsu et al. do not expressly disclose decrypting the encrypted audio by the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store a decryption key in a hearing device to decrypt encrypted data. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 13, the combination of Thompson et al., Hsu et al., and Neoh does not disclose expressly wherein the step of receiving a decryption key comprises transmitting the decryption key from a key FOB carried by the user. However, Examiner takes Official Action that having key fobs transmit a key was well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to have the key fob transmit a key since Examiner takes Official Notice that having key fobs transmit a key was well known in the art.

Regarding claim 14, the combination of Thompson et al., Hsu et al., and Neoh teaches the limitations as set forth under claim 13 above. Furthermore, Hsu et al. teach wherein the step of transmitting the decryption key comprises the user actuating a biometric sensor on the key FOB (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the user actuate a biometric sensor on the key FOB. One of ordinary skill in the art would have been motivated to do so because the use of a biometric sensor was well known in the art (Hsu et al., columns 1-2).

Regarding claim 15, the combination of Thompson et al., Hsu et al., and Neoh does not disclose expressly storing the decryption key in a memory of the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store a decryption key in the memory of the hearing device. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 16, the combination of Thompson et al., Hsu et al., and Neoh does not disclose expressly comprising deleting the decryption key stored in the memory upon a predetermined the event. However, Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was

well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key after a predetermined period of time since Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art.

Regarding claim 17, the combination of Thompson et al., Hsu et al., and Neoh does not disclose expressly deleting the decryption key from the memory periodically. However, Examiner takes Official Notice that performing tasks periodically is/was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key from memory periodically since Examiner takes Official Notice that performing tasks periodically is/was well known in the art at the time the invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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